NINETY SECOND YEAR.

SUNDAY, MARCH 11, 1900.

PRICE FIVE CENTS.

NEW YORK CORPORATION PLANNING TO SELL AIR.

Oxygen, Nitrogen and Carbonic Acid Gas to be Extracted From the Atmosphere For Commercial Uses.

New York, March 8.-Within a few weeks New York is to have a brand new industry. The plant for the enterprise is now being installed at No. 531 West Thirty-third street. The novel industry in prespect is nothing anore nor less than the refising of-air!

Most persons understand something of the way in which petroleum is refined-by septrating the inflammable gases and other constituents of the crude oil, Similarly, New York's new enterprise contemplates the separation of ordinary atmosphere into its constituents-oxygen, nitrogen and carbonic toold gas-in such a way as to make the sultant products of commercial value.

At first blush this may seem to the reader chimerical scheme, but it is backed on the one hand by the highest schuttile approval and on the other by the dollars of hardfisted capitalists. The men composing the company which has undertaken it make no boastful claims; they have no stock to sell; they have gone about the business so quietly that not until now, when their factory is nearly ready to begin operations, has any information regarding the matter come to public knowledge. Evidently they believe that there are money-making possi bilities in the enterprise.

To the ordinary person the suggestion that money can be made out of the atmosphere is surprising. Air is the one commod ity that always has been free to every one, and so mas had no money value. But, while air itself has no marketable value, the various elements which enter into the composition of the atmosphere are bought and sold every day. Oxygen is the fuel of the calcium lights in our theaters; nitrogen is employed in the manufacture of fertilizers; carbonio acid gas has medicinal and other uses which make it valuable. But the use of all three has been restricted hitherto by the difficulty and expense of separating them. The chief advantage of the new process is that it enables this separation to be carried on rapidly and at a very low

The manifold uses to which oxygen might The manifold uses to which oxygen might be put have been apparent to scientists for a forg time, and have awaited only a cheap form of production. It is the method of eneap production that Mr. Henry D. Mc-bowell and his associates believe they have perfected, and which they are instailing in their establishment in West Thirty-initial rect. At the present time oxygen is made by the use of chlorate of potash and is expensive to produce. Under the kew plan, according to Mr. McDowell, it cha be turned out in unimited quantities and at a very low price, as the by-product of carbonic acto gas will pay for the cutire cost of manufacture.

Many Uses for Oxygen.

If this expectation is realized there is lit-tic doubt that exygen will come into very the doubt that Gaygen will come into very general use. In one form or another it is the world's fuel, and its freel value in the pure state is tremendous. We all learned in our school days that Gaygen alone keeps the current control of the pure state is tremendous. We all learned in our school days that Gaygen alone keeps the current control of the pure state of the pur general use. In one form or another it is the world's fuel, and its fuel value in the pure state is tremendous. We all learned in

tank of water, and then enters the con-lenser or liquefler, where it is changed to

fluid form.

It is in this liquefier that the original features of the Ostergren-Burger method are found. The inventors themselves designate their system as the "self-intensification of seld." In unscientific terms it may be described as follows: The air passes through a system of coiled pipes in the interior of the tank. These pipes are arranged in iters and form a dividing wall, which separates the tank into two chambers. A portion of the air brought from the compressors is reicased at high pressure and is allowed to flow about the exterior of the pipes. The fall in temperature accompanying the expansion serves to reduce the air within the pipes to the degree of cold necessary for liquefaction. In other words, the expansion of the air outside the pipes to a liquid state.

The advantage of this system, as it is now to be applied, les in the fact that after the production of liquid air at the pressure of 1.59 pounds has gone on for a short time it is possible to make this air produce more liquid air at a pressure running down to as low as fifteen pounds to the square inch. It sounds ridiculously like the theory of perpetual motion to say that liquid air reproduces itself in larger quantities. As a matter of fact, in the words of Professor Sloane of Columbia University, "it is only fifteen pounds distant from perpetual motion." It is in this liquefier that the original feat-

fifteen pounds distant from perpetual mo-

Liquid air cannot be inclosed in a sealed vessel, as its expansive powers would cause an explosion. At the same time, in shipping the commodity, it is necessary to have it so

vessel, as its expansive powers would cause an explosion. At the same time, in shipping the commodity, it is necessary to have it so shut up that it cannot be spilled in handling. For this purpose Messrs. Ostergren and Burger have devised a portable vessel, which, while permitting contact with the air, holds its contents securely.

The receptacle consists of a central chamber with copper walls surrounded by an insulating layer of felt, which in turn has a thin metal covering. At the top of the inner chamber is an opening covered by a small pinte. The expanding vapor from the liquid air lifts this plate and escapes into a surrounding air chamber, where it serves to keep down the temperature in the passage surrounding the storage chamber. In order to reach the outer air it must pass through the heavy felt insulation—a very slow process. By the use of this apparatus air has been shipped to all parts of the United States from this city at a loss seldom amounting to more than 25 per cent, and in some cases being very much less than that. The men owning the inventions of Mr. Cotergren and Mr. Burger found themselves interested in the possibilities suggested for the use of liquid air as an intermediate agent by the work of Professor Roul Picter's received in the possibilities suggested for the use of liquid air as an intermediate agent by the work of Professor Roul Picter's received in the possibilities suggested for the use of liquid air as an intermediate agent by the work of Professor Roul Picter's received in the possibilities suggested for the use of liquid air as an intermediate agent by the work of Professor Roul Picter's received in the possibilities suggested for the use of liquid air as an intermediate agent by the work of Professor Roul Picter's received in the possibilities suggested for the use of liquid air as an intermediate agent by the work of Professor Roul Picter's received in the possibilities suggested for the possibilities suggested for the possibility of the more distantant production of coone.

Company's establishment, entered into com-munication with him to determine the com-mercial possibilities of the discovery. As a result, Professor Pictet, in turn, became interested in the Ostergren-Burger liquefy-ing process, and made up his mind that a combination of the two would make the commercial manufacture of oxygen entirely feasible.

The Work of Professor Pictet.

time conducting a series of experiments. These have satisfied him that his belief in the commercial possibilities of air refining is entirely justified. He is now superintending the erection of the refining apparatus which is to be employed by Mr. McDowelf and his associates in their first section.

McDowell and his associates in their area venture.

Professor Pictet is one of the most distinguished scientists in Europe. He was born in Geneva, Switzerland, in 1846, was concluded in Paris, and early attained such distinction that the St. Petersburg Academy of Science crowned his investigations and offered to publish all of his researches. Later on, Professor Pictet entered the service of the Vicercy of Egypt, and when his work there was ended he returned to Geneva. This was in 1877, and since that time he has devoted himself chiefly to the investigation of low temperatures, a field in which he was one of the pioneers. In December, 1877, he succeeded in liquefying ox-

How the Separation Is Accomplished. Professor Pictet explained his system for the separation of air into its constituent

the separation of air into its constituent clement.

"It is very simple," he said, "and depends merely upon the difference in specific gravity of these elements and the temperatures at which they assume liquid form. For example, carbonic acid is heavier than either oxygen or nitrogen, while the oxygen has a greater specific gravity than the nitrogen. It is a well-known fact that if liquid air at a certain temperature is allowed to stand exposed to the atmosphere the nitrogen will gradually evaporate. Thus it is easy to separate the two by the proper management of temperature."

Professor Pictet proceeded to illustrate this point, He took a lighted match and held it over the liquid air in one of the open vessels. It was immediately extinguished.

"That is due to the nitrogen," he said.

Thereupon, taking another match, he thrust it quickly beneath the bubbling surface of the liquid, where it burned brittlantly.

"That, you see," said Professor Pictet.

iantly.

"That, you see," said Professor Pictet,
"is exygen. Now, if we have here a closed
is exygen. Now, if we have here a closed 'is oxygen. Now, if we have here a closed vessel, with one passageway leading off near the top and another one near the bottom, the nitrogen may be made to pass through the upper one and the oxygen through the lower one, while the carbonic acid will drip off from the bottom. That, in the rough, is the system which will be followed in my process of separating the air into its constituents. The important point about it all is the fact that it may be accomplished at a low pressure. That means everything, and that is the valuable achievement, Air has been refined at high pressure in different laboratories for many years past."

VIEW the Multiplicity of Magnificent Seasonable New Spring Goods now in all Departments, the culmination of months of research throughout the markets of the world and offered at prices that will infuse new life and vigor into the opening month of the Spring season. Special prices for Monday to make a big selling record!



Washington Avenue and Sixth Street.

Geo.Bryan, Notary Public, on 5th floor. Free Nursery on 4th floor.

Money Order Dept., 1st floor. Pay Gas, Electric and Water License here.

Cafe on 5th floor.

Our Spring and Summer Catalogue for 1900, about to be issued, is the best of its kind to be found anywhere, and is full of interesting and valuable information to our country friends. Send in your

name and address at once. Mailed free.

"MEET ME 'ROUND THE DOME."



Washington Avenue and Sixth Street.

ANOTHER STARTLING SALE OF ...

> Beautiful **Jewelry**

Sterling Silver Thimbles, worth 25c; Special Price, each 100 Gold-plated Pens with pearl

Best quality rolled-plate Link Cuff Buttons, reduced from 25c, 50c and 75c; all Ladies' and Children's Solid Gold Rings, with all color settings; reduced from 75c to (each)..... 25c New Spring

Novelty Silks.

Many of the finest, best and most beautiful of

SILKS.

30 patterns to select from, worth \$1.00 yard-Special offering in Black Peau-de-Soie, pure dye and a silk | binding..... that will wear, worth \$1.35 yard; Special Monday, only, yard 19 pieces Colored Silks, in fancy stripes, in all the spring

Hemstitched Taffetas, all new goods, the very latest silk for waists. We have a full line of colors and they would { De Willoughby Claim-The Other Fellow ... be cheap at \$1.25-

24-inch Brocade India Silks, in large and small designs,

tints, pastel shades and worth 75c yard; Monday

Monday Special, yard

BOOKS.

20th Century Wonder 10c Peck's Uncle Ike and 18c French, German and Spanish Without a Master, in six easy lessons, each..... The Soul of Lileth, Beulah, Cruise of the Cachelot, 38c cloth, each..... Harper's Magazine for Webster's Unabridged Dictionary, cloth Chamber's Encyclopedia-12 vols.

NEW BOOKS.

59c To Have and to Hold - When Knighthood Was in Flower-Richard Carvel-Janice Meredith - David Harum-Via Crucis-Via Lucis-In Connection With the \$1.00 Sappho—The Classic Library. Entered at Post Office as second class matter, March 5th, 1900.

MARCH SALE OF

Handkerchiefs.

This Special Sale means a saving of 1/2 to 1/3 below regular

Women's wide Lace-Trimmed Handkerchiefs, all linen, regular price 50c; Sale Price Ladies' Initial.

Men's all-linen Hemstitched Handker-

Men's Plain White and Colored Printed

No Better Time to Buy Musfins, Sheeting and La Vida Corsets. Pillow Casing, Sheets, Pillow Slips and Bolsters.

Prices at the Big Store are lower than the same values can be had anywhere. Prices have alvanced and when these lots are sold you'll pay us a great deal more. BUY NOW.

Domestics.

5 cases of yard-wide Bleached Mustin, soft finish; no dressing - 50 our regular 6140 quality, will be sold on Monday st, per yard. 7 cases of extra heavy vard-wide Bleached Muslin, soft finish; no dressing-would be cheap at 8 2c, for Monday only, 5 cases of yard-wide Bleached Muslin, Mill Ends, soft finish-ne dressing; in 10-yard bolts—will be sold on Monday at, per bolt, 69c, 75c, 79c, 89c and 500 dozen ready-made Bleached Sheets for full size bed, size \$1x90-our regular 69c quality, for Monday at, each ... size 81x90—our regular ook quality, 200 dozen ready-made Bleached Sheets for 34 beds—our regul 436 lar 65c grade, for Monday at, each. . lar 65c grade, for Monday at, 550 dozen ready-made Unbleached Sheets for full size beds-390 our regular 50c grade, for Monday at, each 500 dozen rendy-made Bleached Pillow Cases, size 42x36our regular 12 c quality, for Monday at, each 100 dozen ready-made Hemstitched Pillow Cases, size

45x36-our regular 1716c quality, for Monday at, each.

A full gore, real whalebone Corset, adapted to the requirements of the most exacting trade.

Among the new models in La Vida we have the very fashionable straight front specially designed to suppress abdominal prominence, giving perfect freedom and grace of carriage. La Vida is made in fifteen different models to suit every



Tailored Street Costumes, Skirts and Fashionable Jackets.

gains for Monday Selling. See quotations below:

A very stylish Jacket, in tan and blue covert cloth, fly \$3.98 front, lined throughout-Special Price..... Ladies' Handsome Double-Breasted Covert Cloth Spring \$4.75 Jackets, surah lined-Special Price Very fine Heavy Cloth Jackets, Romaine lined, some with \$3.98 taffets silk-were \$8.50 to \$9.50-all cut to \$2.98 and .. Ladies' Black Kersey Cloth Coats, strap seams, heavy weight, latest style-were \$10.00, now cut to Ladies' Tailor-Made Venitian Cloth Suits, braid trimmed-cut from \$15.00, \$18.50 and \$20.00, down to.

One lot of Black Heavy Weight Jackets-were \$4.50 to \$1.00 \$6.50, all cut to..... Misses' All-Wool Venitian Cloth Suits, silk-lined Jackets, cord

edged, colors red and tan-were \$12.50 to \$15.00,

Sale of SAMPLE SHOES.

We received the SECOND SHIPMENT of SAMPLE SHOES from the well-known shoe manufacturers, Val. Duttenhoffer & Sons of Cincinnati, Ohio, at the same price-50c off the dollar. They consist of Shoes of every description; Patent Leather, Imperial Kid, Hand Turn or Hand Sewed, Common Sense, Opera and Louis XIV heel. Not a pair of these Shoes worth less than \$3.00 and up to \$6.00 a pair. To close them out quickly we have divided \$1.59 pm \$1.98 TABLE No. 1. TABLE No. 2.

At \$1.59 — In this lot Ladies' Fine Imperial you will find Ladies' Lace Kid, in black, tan or chocolate brown, kid Patent Vici or Imperial Kid, hand turn or extended soles, coin or buildog lasts, lace or button, opera or military heel-every pair of above are finished with silk top facing and worth not less than \$3.00 and up to \$4.00 a pair-

\$1.59

or vesting tops, hand-sewed, single or heavy extended soles, opera, mannish or Louis XIV heel. In this lot you will find some very fine patent leather shoes in kid or vesting tops, not a pair of above less than \$4.50 and up to 86 a pair; your choice \$1.98

for. Ber If you are not in need of a pair of Shoes now, it will pay you to buy these for future use.

Morrow at Prices that will create a sensation and tremendous selling in LACE DEPT.

Our buyer, when East, came across big job of Torchon and Medici Lace and Insertions, 2,000 pieces in all, bought at his own price; look for the greatest bargains ever offered in Laces this week, from 1 to 5 inches wide, worth from 10c to 15c a yard;

1,000 different styles of Lace Allovers to show you. Lace and embroidery effects, from 50c upward; Point Venice, both cream and white, from 95c upward; black Mercerized from \$1.00 upward; black Chantilly from 50c upward, also Maltese, Renaissance, Applique, etc., up to \$10.00 a yard. 10 pieces Black Silk Renaissance All-

over, open work pattern, a bargain at The handsomest stock of Planen or

Point Venice Insertions ever imported, from 1 to 5 inches wide and from 10c a

The Best and Most Desirable Styles in

New Spring Dress Goods

Are being added daily to our great exhibit, and we are able to offer this week choice from the greatest assortment in St. Louis at prices that make buying

29¢ for 38-inch new Tweed Mixtures and Cheviot effects, stylish designs and latest colorings, regular 40c val. 35c for 38-inch Granite Checks, three-color effects, very desirable for skirts; worth 50c.

49¢ for new Camel's Hair and Home-496 spun Skirting Plaids, all the popular gray, castor, blue and brown combinations, equal in appearance to

50c for new French All-wool Serges, Henriettas, Vigoureux Suiting Menriettas, Vigoureux Suiting and Habit Cloths, all the latest colorings; regular 69c value.

lar \$1.00 value. 85¢ for 42-inch high-grade French Poplins, best value in St. Louis; sold everywhere at \$1.00.

75c for 45-inch new Silk Mixed Crepous in gray, tan, castor and blue, very suitable for skirts; regu-

\$1.00 for 45-inch new French Marmont Cloth, one of the latest novelties of the season, very desirable for Tailor-made Suits; worth £1.25.

\$1.15 for 48-inch French Double-Warp Whipcord Suiting, best value in the city; worth \$1.50.

Our line of Broadcloths and Venetians, ranging from \$1.00 to \$1.69, we guarantee the best value in America. We have now in stock a complete line of all the most sought after novelty shades as well as the staple colors.

AN UNUSUAL OPPORTUNITY! OUR SALE OF ...

HOUSEHOLD LINENS.

We contracted for the goods we now advertise months ago when linen prices were at the lowest point. This enables us to quote the low prices we here announce. Read these wonder-ful values and lay in your supply.

65-inch full bleached alt-linen Table Damast. in Fleur de Lis. snow drop and parsy desirus. 750 well worth \$1.00: will go at. 72-inch full bleached Table Damask, regular price (Se: 15 pieces extra heavy Barnsley Hotel Table Damask 66 in thes wide, regular price 75c; will go 60 Inch Crean, Table Damask, all linen and faucy rest borders, well and rates will go at, per 60c 156 dozen full size Dinner Napkins, full bleached, regular price \$1.35, will go at, per dozen.

150 dozen 21x47 all-linea Satin Damask Towels, anotted fringe and red borders; a special run for Monday only, each.... 25c 50 Crochet Bedspreads. Marseilles

putterns, hen med and ready for use, well worth the, will go at, each t case extra full size Crochet Bed-spreads, hemmed and ready for use. Marsellies patterns, reg-ular price \$1.25, will go at, each.

18 pieces German half-blenched all-

New Spring Dainty Wash Fabrics

A superb and elaborate showing of all the New 1900 Dainty Wash Fabrics, and offered, as usual, at our attractive low prices.

306 yards of Fine Printed Madras, 32 inches wide, in short lengths of 2 to 6 yards; regular 12 cquality, Monday, per yard. 150 pieces 32-inch French Zephyr Gingham in all 101 good colorings. in such patterns as stripes and plaids; Monday's price, per yard. 12/20 An elegant line of imported Pique in fancy stripes and

floral designs, 32 inches wide, per yard.... One of the very newest fabrics for Summer Dresses and Shirt Waists is our over-lace stripe Scotch Gingham, which we have in all the delicate shades of the season; we offer these goods at, per yard.

offer these goods at, per yard...... 75 pieces 32-inch French Sateen in blue, black and red grounds with foulard designs—a quality we have been selling at 25c; Mouday, per yard **NEW SPRING HOSIERY.**

Just such prices as these keep us busy from morning till night, and justify our reputation as headquarters. Each item is a leader and the chance for the economical buyer.

Ladies' Imported Fast Black Cotton Hose, high spliced heel 19c and toe, French feet, Hermsdorf black, always sell at 25c 19c Ladies' Imported French Lisle Thread Hose, opera length and opera shades, blue, pink, lavender, red, straw; also boot pat- 50c terns, Richelieu rib, French feet, regular price 75c and \$1.... Ladies' Imported Freuch Lisle Thread Lace Hose, high spliced heels and toes, French feet, blacks and tans, always sold at 65c.....

Ladies' Imported Fine Gauge Cotton Hose, high spliced heel and toe, combed Maco yarn, pearl grays, stripes and white Ladies' French Lisle Thread Hose, fancy stripes and boot patterns, full regular made, French feet, plain and Richelieu rib, regular price 75c and 89c

Children's Imported Fine Gauge Fast Black Cotton Hose, 1x1 rib, unbleached, split feet, high spliced heel and toe, double

Children's extra fine gauge French Lisle Thread Hose, 1x1 rib. high spliced heel and toe, regular price 25c Boys' extra heavy Cotton School Hose, fast black, double knees,

spliced heel and toe, 2x2 rib, always sold at 20c;

REGIMENTAL NICKNAMES.

How "Die-Hards" and "Nanny Goats" Earned Such Names.

25 dozen 21x45 Cream Turkish Both

Towels, extra heavy and close 15C

To a mete civillan it may not seem a mat-ter of dire importance how a man wears his sword belt, provided it keeps the weapon in its proper place. But a well-regulated Eighth Hussar would scorn to wear his round his waist as other cavaltymen do, knowing that he alone has the proud privilege of wearing it over his right shoulder. This has been allowed ever since 1768, as a reward for the valor shown 1768, as a reward for the valor shown by bis regiment at the Battle of Saragosa, where, among other things, it captured the beits of the Spanish cavalry opposed to it. Hence its nickname of the cross beits. Then the Northumberland Fusiliers and the Scots Greys both prize their bearskins all the more highly that the right to wear them was conferred as a recognition of special acts of valor. The former defeated a division of French Grenadler Guards at Wilhelmstahl in 1762 and the latter captured

the colors of the Regiment du Rot at the Battle of Ramillies in 136. And it is not on record that the Black Watch have ever petitioned the War Office for leave to discard their kills—even vien the French called them "Scotch savaget," and asserted that they ran about naked on their native hills. One of the most honorable titles in the army is that borne by the Middlesex regiment—"the Die-hards." It has clung to them ever since the Battle of Albuhera, when the old Pifty-seventh, as it was then called, was almost annihilated, having lost twenty-two officers out of twenty-five, and the monout of \$10. The Colonel kept crying out, "Die hard, my men, die hard" and it has never been forgotten. Indeed, at the baftle of Inkerman their leader saved the situation at a critical moment by shouting: "Die-hards, remember Albuhera."

By the way, it might be a trife risky if an officer of the Royal Welsh Fusiliers, for instance, strove to rally his men in the thick of a fight by crying: "Nanny Goats, remember Minden;" for it was by an act of deliberate dischedience that they succeeded so brilliantly on that memorable day, Luckily for them, they fared no worse than did Nelson at Copenhagen.

Trutly a poetical soul was he who first dubbed the Northampton Regiment "the Steelbacks," from the heroic way they bore

Hotel Empire. New York, high-class hotel, moderate rates. See ad. on page op-posite editorial of this paper.

BABY FOX ADOPTED.

Ewe Takes Care of a Captured Youthful Reynard. Nye of Hopbottom, Susquehanna County,

stead of the wild cat the trap caught a fox and the farmer promptly dispatched it, says the New York Press.

Hardly had he done so when a little baby fox came out from the brush and mogned piteously around its dead mother. The farmer took it home. Refusing the food offered to it, the little fox was in a fair way to starve to death, when Mrs. Nye had a bright blea.

One of the ewes had been robbed of her young by the wild cats, and the little fox was carried to the hereaved ewe to receive nourishment. The fox throve amazingly on sheep's milk, and the strange foster-mother formed a strong attachment for the little fellow. Before other animals and to all human beings, except Nye, the fox is extremely shy, but it sleeps side by side with the ewe, and the farmer can handle it like a house dog.—Pittsburg Dispatch.

All transfer points, owl-car time-tables and routes of all street railroads given in The Republic's book of "Street Car Facts," Get one free at Republic Office, Seventh and Olive streets.

Nye of Hopbottom, Susquehanna County,
Pa., has a domesticated fox. Last spring
he discovered that something was carrying
off his poultry. He suspected a wild cold it
he set a trap to catch the maradays, 10 to 2. Cleveland Plain Deuler.